8.2 MODEL INPUT

The Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Version 3 (SCREEN3), (dated 96043) model, was used for this analysis.

8.2.1 EMISSION AND SOURCE DATA

Emission units at the facility and the modeled stack parameters are listed in Table 8.2-1.

Table 8.2-1
Emission Units and Stack Parameters (Modeled)

Unit No.	Type	Ht. (m)	Temp. (K)	Vel. (m/sec)	Diam. (m)	Emissions in lb/hr			
						SO_2	PM-10	NOx	CO
1	Door Coating Spray Booth	9.14	293	40.43	0.61	0.0	0.46	0.0	0.0
3	Roll Coater # 2[2], Fan Coater # 5[2]	7.01	293	3.59	0.91	0.0	0.0	0.0	0.0
4	Oven Heater # 1- 140,000 Btu/hr	6.09	293	0.001	5.48	0.000082	0.0010	0.014	0.0115
5	Oven Heater # 2 - 140,000 Btu/hr	6.09	293	0.001	5.48	0.000082	0.0010	0.014	0.0115
6	Oven Heater # 3 - 140,000 Btu/hr	6.09	293	0.001	5.48	0.000082	0.0010	0.014	0.0115
7	Oven Heater # 4 - 140,000 Btu/hr	6.09	293	0.001	5.48	0.000082	0.0010	0.014	0.0115
8	Space Heater # 1 - 100,000 Btu/hr	6.09	293	0.001	5.48	0.000059	0.00075	0.0098	0.0082
9	Space Heater # 2 - 100,000 Btu/hr	6.09	293	0.001	5.48	0.000059	0.00075	0.0098	0.0082
10	Space Heater # 3 - 100,000 Btu/hr	6.09	293	0.001	5.48	0.000059	0.00075	0.0098	0.0082
11	Fan Coater # 1, Fan Coater # 4	7.01	293	3.59	0.91	0.0	0.0	0.0	0.0
12	Fan Coater # 2	7.01	293	3.59	0.91	0.0	0.0	0.0	0.0
13	Fan Coater # 3[2], Printer # 1[2], Printer # 2[2], Roll Coater # 1[2]	7.01	293	3.59	0.91	0.0	0.0	0.0	0.0
15	Oven Heater # 5 - 140,000 Btu/hr	6.09	293	0.001	5.48	0.000082	0.0010	0.014	0.0115
16	Oven Heater # 6 - 140,000 Btu/hr	6.09	293	0.001	5.48	0.000082	0.0010	0.014	0.0115
17	Oven Heater # 7 - 140,000 Btu/hr	6.09	293	0.001	5.48	0.000082	0.0010	0.014	0.0115
18	Oven Heater # 8 - 140,000 Btu/hr	6.09	293	0.001	5.48	0.000082	0.0010	0.014	0.0115
19	Space Heater # 4 - 100,000 Btu/hr	6.09	293	0.001	5.48	0.000059	0.00075	0.0098	0.0082
20	Space Heater # 5 - 100,000 Btu/hr	6.09	293	0.001	5.48	0.000059	0.00075	0.0098	0.0082

All emission units emit from stacks and are therefore point sources. No area or volume sources are included in this modeling. In accordance with the IDEQ modeling guidelines, horizontal stacks were given a default velocity of 0.001 meters per second (m/sec). Vertical stacks with rain caps were given a default stack velocity of 0.001 m/sec.

The worst case stacks for fuel burning equipment are Ref #18 and Ref #19; together they have an Area of Potential Influence to impact the most buildings (518 Kit, 604 Kit, 612 Kit + Storage Wing, Northeast Corner Storage, Mini Storage and Paint Storage). Each one of these buildings was modeled with the worst case fuel-burning stack parameters possible, a stack velocity of 0.0033 ft/sec (0.001 m/s), flow rate of 50 acfm (1.4 m^3/min), stack height of 20 ft (6.09 m), temperature of 280 °F (410.9 K), and a stack diameter of 17.9 feet (5.48 m) to determine worst case emissions from downwash. The stack diameter was manipulated to give a stack velocity of 0.001 m/sec. The actual stack diameter is 0.667 ft (0.2 m).

The worst case stacks for toxics are Ref #3 and Ref #10, together they have an Area of Potential Influence the most buildings (518 Kit, 604 Kit, 612 Kit + Storage Wing, Northeast Corner Storage, Mini Storage and Paint Storage). Each one of these building was modeled with the worst case fuel-burning stack parameters possible, a flow rate of 5,000 acfm (141.6 m^3/min), stack velocity of 11.8 ft/sec (3.59 m/s), temperature of 70 °F (293 K), and a stack diameter of 3 feet (0.91 m) to determine worst case emissions from downwash. The stack height was modeled at 23 feet (7.01 m) to take into account the proposed wall vent stack height increases.

8.2.2 Modeling and Results

The objective of the modeling analysis was to determine the maximum ambient concentrations of criteria pollutants and TAPs for comparison with NAAQS, AACC and ACC respectively. Ambient air background levels applicable to this area will be added to the air dispersion model output for comparison to NAAQS, AACC and ACC standards. The applicable NAAQS, TAPs and the associated background concentrations used in this modeling, as prescribed by IDEQ, are shown in Table 8.2-2.

The maximum SCREEN3 concentrations from the spray booth, oven/heater and TAPs emissions were used to calculate ambient concentrations. The ambient concentrations plus the background concentrations were summed together to create a total ambient concentration; the total concentration was then compared to the NAAQS or TAPs standards.

Table 8.2-2
National Ambient Air Quality Standards and Background Concentrations

Pollutant	Averaging Period	NAAQS ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)
PM_{10}	Annual	50	86
	24-Hour	150	32.7
NO_2	Annual	100	40
SO_2	Annual	80	18.3
	24-Hour	365	120
	3-Hour	1300	374
CO	8-Hour	10,000	5,130
	1-Hour	40,000	11,450
Formaldehyde	Annual	77*	NA
Toluene	24-Hour	18,750**	NA

*Is an AACC annual standard.
** Is an ACC 24-hour standard.

8.2.3 SO_2 Modeling

The facility SO_2 sources were modeled for the 3-hour, 24-hour, and annual averaging times. The results are summarized in Table 8.2-3 below. The appropriate background concentrations have been added to determine compliance with the NAAQS.

Table 8.2-3
Refined SO_2 Modeling Results

Source	Modeled Impacts ($\mu g/m^3$)		
	Annual	3-hour	24-hour
Oven/Heater	0.21	2.3	1.02
Background	18.3	374	120
Total $\mu g/m^3$	18.5	376.3	121.0
NAAQS ($\mu g/m^3$)	80	1300	365
% NAAQS	23.1%	28.9%	33.2

All impacts are below NAAQS. No further SO_2 modeling is necessary.

8.2.4 NO_2 Modeling

The facility NO_2 sources were modeled for the annual averaging time. All emitted NOx is assumed to be converted to NO_2 for this analysis. The results are summarized in Table 8.2-4 below. The appropriate background concentrations have been added to determine compliance with the NAAQS.

Table 8.2-6
Refined CO Modeling Results

Source	Maximum Modeled Impacts ($\mu g/m^3$)	
	1-hour	8-hour
Oven/Heater	0.13	251.9
Background	11,450	5,130
Total $\mu g/m^3$	11,451.1	5,381.9
NAAQS ($\mu g/m^3$)	40,000	10,000
% NAAQS	28.6%	53.8%

All impacts are below NAAQS; no further CO modeling is required.

8.2.7 FORMALDEHYDE MODELING

The facility formaldehyde sources were modeled for the annual averaging times. The results for are summarized in Table 8.2-7 below. All impacts are below AACC; no further formaldehyde modeling is required.

Table 8.2-7
Formaldehyde Modeling Results

Source	Maximum Modeled Impacts ($\mu g/m^3$)
	Annual
Spray Booth	0.017
Background	NA
Total $\mu g/m^3$	0.017
AACC ($\mu g/m^3$)	0.077
% AACC	22.1%

8.2.8 TOLUENE MODELING

The toluene source was modeled for the 24-hour averaging time. The result is summarized in Table 8.2-8 below. All impacts are below ACC; no further toluene modeling is required.

Table 8.2-8
Toluene Modeling Results

Source	Maximum Modeled Impacts (µg/m³) 24-hour
Coatings Operation	16,220
Background	NA
Total µg/m³	16,220
ACC (µg/m³)	18,750
% ACC	86.5%

8.3 SUMMARY

The modeling results indicate that criteria pollutant and toxic emissions from this facility will not cause or contribute to any exceedances of NAAQS or TAP standards. Table 8.3-1 summarizes the results of the modeling demonstrating NAAQS and TAPs compliance.

The following pages contain downwash and stack parameters utilized in the NAAQS and TAPs compliance demonstration. Supporting documentation is also contained in the following pages.

Table 8.3-1
Modeling Results Summary

Pollutant	Averaging Time	Source Emissions µg/m³	Background µg/m³	Total µg/m³	NAAQS µg/m³	% NAAQS
SO_2	Annual	0.21	18.3	18.5	80	23.1%
	3-hour	2.3	374	376.3	1,300	28.9%
	24-hour	1.02	120	121.0	365	33.2%
NO_2	Annual	34.5	40	74.5	100	74.5%
PM-10	Annual	2.97	36.7	39.7	50	79.3%
	24-hour	14.8	130	144.8	150	96.6%
CO	1-hour	0.13	11,450	11,451.1	40,000	28.6%
	8-hour	251.9	5,130	5,381.9	10,000	53.8%
Formaldehyde	Annual	0.017	NA	0.017	0.077*	22.1%
Toluene	24-hour	16,220	NA	16,220	18,750**	86.5%

*Is an AACC annual standard.
**Is an ACC 24-hour standard.

8.4 APPENDIX A – IDEQ MODELING CHECKLIST

Idaho DEQ Air Dispersion Modeling Checklist

As a requirement of the air permitting process, an air dispersion modeling analysis (screening and/or refined) must be conducted. Air dispersion models are used to predict the potential impact something may have on the air shed in which it is located. This checklist will aid in collecting all of the necessary information to perform a complete modeling analysis. The EPA Guideline on Air Quality Models and the DEQ Modeling Protocol should be used as a reference to ensure that the modeling techniques used will meet federal and state approval. Please include computer disk copies of the DOS versions of input and output files sufficient for DEQ to reproduce model runs. Copies of the meteorological data files used and all building information should also be included. A scaled plot plan showing the location of all structures needs to be submitted as part of the permitting application.

It is important that the **most recent model versions** be utilized in any analysis.

1. Name of Applicant/ Company: Teton Sales Company

Facility Description: Wood Products Coating Operations
Caldwell, Idaho

Dispersion Model(s) Used: The Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Version 3 (SCREEN3) dated 96043.

2. Source Classification:

Number of Point Sources (Section 3) 23

Number of Area Sources (Section 4) 0

Number of Volume Sources (Section 5) 0

3. Stack/Point Source Parameters (please include for each stack/point source modeled). List the **Maximum** Emissions Rate(s) for each pollutant. NOTE: If the stack is not circular,

use equivalent dimensions determined by AREA = $\pi d^2/4$, where d is the inner stack diameter.

Source Spray Booth : (all rates in lb/hr)

PM_{10} 0.46 $PM_{2.5}$ _____ NO_x 0.0 SO_2 0.0 CO 0.0 VOC 16.52

Toxic(s) (Please List): Ammonia (0.054), 1,2-Ethanediol (0.044), Free Formaldehyde (0.013).

Stack Height 30 ft Stack Diameter 2 ft Stack Temperature 70 F

Stack Exit Velocity: 132.7 ft/sec and/ or **Actual** Stack Flow Rate 25,000 acfm

---

Source : Roll Coater # 1 (all rates in lb/hr)

PM_{10} 00.0 $PM_{2.5}$ _____ NO_x 0.0 SO_2 0.0 CO 0.0 VOC 2.07

Toxic(s) (Please List): Toluene (1.17), MEK (0.52), MIK (0.001), Methanol (0.001), Acetone (9.35), Isopropanol (0.17), Ethyl Acetate (0.001)

Stack Height 8 ft Stack Diameter 2.67 ft Stack Temperature 70 F

Stack Exit Velocity 14.9 ft/s and/ or **Actual** Stack Flow Rate 5,000 acfm

---

Source Roll Coater # 2 (all rates in lb/hr) :

PM_{10} 0.0 $PM_{2.5}$ _____ NO_x 0.0 SO_2 0.0 CO 0.0 VOC 2.07

Toxic(s) (Please List): Toluene (1.17), MEK (0.52), MIK (0.001), Methanol (0.001), Acetone (9.35), Isopropanol (0.17), Ethyl Acetate (0.001)

Stack Height 4 ft Stack Diameter 3 ft Stack Temperature 70 F

Stack Exit Velocity 11.8 ft/sec and/ or **Actual** Stack Flow Rate 5,000 acfm

Source Fan Coater # 1 (all rates in lb/hr):

PM_{10} 0.0 $PM_{2.5}$ ____ NO_x 0.0 SO_2 0.0 CO 0.0 VOC 19.94

Toxic(s) (Please List): Toluene (11.7), MEK (3.84), MIK (0.5), Xylene (1.0), Methanol (0.33), Acetone (12.88), Isopropanol (2.21), Ethyl Benzene (0.19), Cumene (0.09)

Stack Height 20 ft Stack Diameter 2 ft Stack Temperature 70 F

Stack Exit Velocity 26.54 ft/s ALL and/ or **Actual** Stack Flow Rate 5,000 acfm

---

Source Fan Coater # 2 (all rates in lb/hr):

PM_{10} 0.0 $PM_{2.5}$ ____ NO_x 0.0 SO_2 0.0 CO 0.0 VOC 34.82

Toxic(s) (Please List): Toluene (10.75), MEK (9.86), MIK (1.21), Xylene (0.45), Methanol (0.8), Acetone (4.7), Isopropanol (0.9), Ethyl Benzene (0.09), Isobutyl Acetate (1.79)

Stack Height 20 ft Stack Diameter 2 ft Stack Temperature 70 F

Stack Exit Velocity 26.54 ft/s ALL and/ or **Actual** Stack Flow Rate 5,000 acfm

---

Source Fan Coater # 3 (all rates in lb/hr):

PM_{10} 0.0 $PM_{2.5}$ ____ NO_x 0.0 SO_2 0.0 CO 0.0 VOC 23.10

Toxic(s) (Please List): Toluene (14.8), MEK (9.86), MIK (2.08), Xylene (0.05), Methanol (1.38), Acetone (9.55), Isopropanol (1.37), Ethyl Benzene (0.01), Isobutyl Acetate (0.25), 2-Butoxyethanol (0.01)

Stack Height 8 ft Stack Diameter 2.67 ft Stack Temperature 70 F

Stack Exit Velocity 14.9 ft/s and/ or **Actual** Stack Flow Rate 5,000 acfm

---

Source Fan Coater # 4 (all rates in lb/hr):

PM_{10} 0.0 $PM_{2.5}$ NO_x 0.0 SO_2 0.0 CO 0.0 VOC 34.82

Toxic(s) (Please List): Toluene (10.75), MEK (9.86), MIK (1.21), Xylene (0.45), Methanol (0.8), Acetone (4.7), Isopropanol (0.9), Ethyl Benzene (0.09), Isobutyl Acetate (1.79)

Stack Height 20 ft Stack Diameter 2 ft Stack Temperature 70 F

Stack Exit Velocity 26.54 ft/s ALL and/ or **Actual** Stack Flow Rate 5,000 acfm

---

Source Fan Coater # 5 (all rates in lb/hr):

PM_{10} 0.0 $PM_{2.5}$ NO_x 0.0 SO_2 0.0 CO 0.0 VOC 19.94

Toxic(s) (Please List): Toluene (11.7), MEK (3.84), MIK (0.5), Xylene (1.0), Methanol (0.33), Acetone (12.88), Isopropanol (2.21), Ethyl Benzene (0.19), Cumene (0.09)

Stack Height 20 ft Stack Diameter 2 ft Stack Temperature 70 F

Stack Exit Velocity 26.54 ft/s ALL and/ or **Actual** Stack Flow Rate 5,000 acfm

---

Source Printer # 1 (all rates in lb/hr):

PM_{10} 0.0 $PM_{2.5}$ NO_x 0.0 SO_2 0.0 CO 0.0 VOC 2.9

Toxic(s) (Please List): Toluene (0.009), MIK (0.086), Xylene (0.008), Methanol (0.06), Acetone (0.44), Isopropanol (0.09), Ethyl Benzene (0.0002), Ethyl Acetate (0.013), 2-Butoxyethanol (0.004), Isobutyl Acetate (0.017), Butanol (0.017), Butyl Acetate (0.92).

Stack Height 8 ft Stack Diameter 2.67 ft Stack Temperature 70 F

Stack Exit Velocity 14.9 ft/s and/ or **Actual** Stack Flow Rate 5,000 acfm

---

Source Printer # 2 (all rates in lb/hr):

PM_{10} 0.0 $PM_{2.5}$ NO_x 0.0 SO_2 0.0 CO 0.0 VOC 2.9

Toxic(s) (Please List): Toluene (0.017), MIK (0.17), Xylene (0.016), Methanol (0.109), Acetone (0.89), Isopropanol (0.18), Ethyl Benzene (0.0004), Ethyl Acetate (0.026), 2-Butoxyethanol (0.008), Isobutyl Acetate (0.033), Butanol (0.033), Butyl Acetate (1.84).

Stack Height 8 ft Stack Diameter 2.67 ft Stack Temperature 70 F

Stack Exit Velocity 14.9 ft/s and/ or **Actual** Stack Flow Rate 5,000 acfm

---

Source Oven Heaters 1 through 8 (all rates in lb/hr):

ALL
PM_{10} 0.008 $PM_{2.5}$ ____ NO_x 0.11 SO_2 0.0007 CO 0.09 VOC 0.006

Toxic(s) (Please List): NONE

Stack Height #s 1-6 = 20 ft, #s 7-8 = 23 ft Stack Diameter 0.42 ft Stack Temperature 280 F

Stack Exit Velocity 6.02 ft/s and/ or **Actual** Stack Flow Rate 50 acfm

---

Source Space Heaters 1 through 5 (all rates in lb/hr):

ALL
PM_{10} 0.003 $PM_{2.5}$ ____ NO_x 0.05 SO_2 0.0003 CO 0.04 VOC 0.003

Toxic(s) (Please List): NONE

Stack Height #s 1-4 = 20 ft, # 5 = 23 ft Stack Diameter 0.67 ft Stack Temperature #s 1, 4 and 5 = 190 F, # 2 = 175 F, # 3 = 250 F

Stack Exit Velocity 2.4 ft/s and/ or **Actual** Stack Flow Rate 50 acfm

4. Area Source Parameters (please include for each area source modeled). List the **Maximum** Emissions Rate(s) for each pollutant.

Source NONE:

PM_{10} _____ $PM_{2.5}$ _____ NO_x _____ SO_2 _____ CO_____VOC _____

Toxic(s) (Please List):_____

Source Height _____ Easterly Dimension _____ Northerly Dimension _____
_____

Initial Vertical Dimension _____ Angle from North ___
_____

---

5. Volume Source Parameters (please include for each volume source modeled). List the **Maximum** Emissions Rate(s) for each pollutant.

Source _____NONE_____:

PM_{10} _____ $PM_{2.5}$ _____ NO_x _____ SO_2 _____ CO_____VOC _____

Toxic(s) (Please List):_____

Source Height _____ Initial Horizontal Dimension _____

Initial Vertical Dimension _____

---

6. Structure Parameters: **(Applies to any and all structures within the property boundary(ies) as well as nearby structures that may influence the dispersion of pollutants emitted by the source(s))**

Building ____518 Kit_____:

Building Tier #1 Height: ___20'___ Building Tier #1 Length: __130'__ Building Tier #1 Width: _____80'___

Building Tier #2 Height: _____ Building Tier #2 Length: _____ Building Tier #2 Width: _____

Building Tier #3 Height: _____ Building Tier #3 Length: _____ Building Tier #3 Width: _____

Building 604 Kit :

Building Tier #1 Height: 20' Building Tier #1 Length: 106' Building Tier #1 Width: 80'

Building Tier #2 Height: _____ Building Tier #2 Length: _____ Building Tier #2 Width: _____

Building Tier #3 Height: _____ Building Tier #3 Length: _____ Building Tier #3 Width: _____

Building 612 Kit :

Building Tier #1 Height: 20' Building Tier #1 Length: 100' Building Tier #1 Width: 60'

Building Tier #2 Height: _____ Building Tier #2 Length: _____ Building Tier #2 Width: _____

Building Tier #3 Height: _____ Building Tier #3 Length: _____ Building Tier #3 Width: _____

Building 612 Kit – Storage Wing :

Building Tier #1 Height: 20' Building Tier #1 Length: 42' Building Tier #1 Width: 30'

Building Tier #2 Height: _____ Building Tier #2 Length: _____ Building Tier #2 Width: _____

Building Tier #3 Height: _____ Building Tier #3 Length: _____ Building Tier #3 Width: _____

Building Mini Storage - Parallel and adjacent to west property line:

Building Tier #1 Height: 14' Building Tier #1 Length: 465' Building Tier #1 Width: 30'

Building Tier #2 Height: _____ Building Tier #2 Length: _____ Building Tier #2 Width: _____

Building Tier #3 Height: _____ Building Tier #3 Length: _____ Building Tier #3 Width: _____

Building Metal Building - Kit Avenue, at southeast corner of property:

Building Tier #1 Height: 16' Building Tier #1 Length: 72' Building Tier #1 Width: 32'

Building Tier #2 Height: _____ Building Tier #2 Length: _____ Building Tier #2 Width: _____

Building Tier #3 Height: _____ Building Tier #3 Length: _____ Building Tier #3 Width: _____

Building Metal Building - Immediately west of metal building at southeast corner of property:

Building Tier #1 Height: 16' Building Tier #1 Length: 70' Building Tier #1 Width: 30'

Building Tier #2 Height: _____ Building Tier #2 Length: _____ Building Tier #2 Width: _____

Building Tier #3 Height: _____ Building Tier #3 Length: _____ Building Tier #3 Width: _____

Building Metal Building - Immediately east of 612 Kit Avenue and North of metal building at southeast corner of property :

Building Tier #1 Height: 14' Building Tier #1 Length: 80' Building Tier #1 Width: 28'

Building Tier #2 Height: _____ Building Tier #2 Length: _____ Building Tier #2 Width: _____

Building Tier #3 Height: _____ Building Tier #3 Length: _____ Building Tier #3 Width: _____

Building Paint Storage - Immediately east of 604 Kit Avenue :

Building Tier #1 Height: 10' Building Tier #1 Length: 56' Building Tier #1 Width: 20'

Building Tier #2 Height: _____ Building Tier #2 Length: _____ Building Tier #2 Width: _____

Building Tier #3 Height: _____ Building Tier #3 Length: _____ Building Tier #3 Width: _____

Building Storage - Immediately east of paint storage building:

Building Tier #1 Height: 14' Building Tier #1 Length: 42' Building Tier #1 Width: 35'

Building Tier #2 Height: _____ Building Tier #2 Length: _____ Building Tier #2 Width: _____

Building Tier #3 Height: _____ Building Tier #3 Length: _____ Building Tier #3 Width: _____

Building Storage - Immediately east of 518 Kit, near northeast corner of property:

Building Tier #1 Height: 24' Building Tier #1 Length: 80' Building Tier #1 Width: 48'

Building Tier #2 Height: _____ Building Tier #2 Length: _____ Building Tier #2 Width: _____

Building Tier #3 Height: _____ Building Tier #3 Length: _____ Building Tier #3 Width: _____

Tank Acetone Tank
Tank Height NA
Tank Diameter NA
Tank Capacity 3,384 Gallons

Tank _____
Tank Height _____
Tank Diameter _____

Tank _____
Tank Height _____
Tank Diameter _____

7. Scaled Plot Plan Showing: (Make sure that all of the buildings and tanks shown on the scaled plot plan are also listed in section 6.)

Emission Release Locations X
Buildings X
(On site and neighboring)
Tanks NO
(On site and neighboring)

Property Boundary(ies) X Potential Co-contributor(s) NA

Sensitive Receptors NA

Note: Sensitive receptor is defined in IDAPA 58.01.01.007.10 as any residence, building or location occupied or frequented by persons who, due to age, infirmity or health based criteria, may be more susceptible to the deleterious effects of a toxic air pollutant than the general population including, but not limited to, elementary and secondary schools, day care centers, playgrounds and parks, hospitals, clinics, and nursing homes.

8. Topographic Map Showing: Not Applicable to Screen3

Source Location(s) _____ Building _ Tanks _____
(On site and neighboring) (On site and neighboring)

Property Boundary(ies) _____ Model Receptors _____ Maximum Impact Locations ____

9. Meteorology Used (upper air and surface data):

On Site NA

A quality control and quality assurance analysis, consistent with EPA guidelines, should be included for any on site data used other than that supplied by the National Weather Service (NWS). Contact DEQ regarding the adequacy of this data before use.

NWS Data Representative of the Site Pocatello Airport Surface Data 1987-1991, Boise Airport UperAir Data 1987-1991

Screening (Worst Case) Data NA
Used DEQ approved Screening Met. data

10. Urban _____ Rural X____ (DEQ can be contacted for further guidance on source classification)

Justification:

Review of 1991 serial photography, a 3-kilometer circle centered at the site, shows land use is less than 50% for I1, I2, C1, R2 or R3 type development.

Completeness Determination Questions:

- Was a modeling protocol approved by DEQ prior to permit application? Negotiating a modeling protocol with DEQ assures the applicant that their modeling approach will be accepted. NO
- Is a justification given explaining why a particular dispersion model was used? YES
- Did you document and justify input parameters and model settings (please include written justification)? YES
- Were grid receptors placed 100 to 500 m apart for the initial modeling analysis in order to find the area of maximum impact? NA
- Were grid receptors placed 25 to 50 m apart in the area of maximum impact? NA
- What ambient air quality standards apply? (i.e. NAAQS, significance standards, AAC, AACC, PSD increment standards) NAAQS, AACC, ACC
- Were DEQ approved background concentrations included in the modeling analysis (attainment and unclassified areas only)? YES

Considerations for major pollution sources and sources subject to PSD regulations:

- Was DEQ contacted regarding the need for (and quality control of) preconstruction monitoring data? NA
- Was a visibility analysis performed? NA
- Was the area of significant impact documented? NA

- Were impacts included (on disk) at all integral UTM coordinates within the significant impact area? NA

- If a major facility (as defined in IDAPA 58.01.01.006.55), was cumulative increment consumption analyzed? NA

Signature of modeler (please print and sign name) Daniel Heiser, P.E. for Leslie Nolting

Telephone Number (801) 943-4144

Name of DEQ Modeling Contact Kevin Schilling

Telephone Number (208) 373-0112

Appendix C

Modeling Input File

(See Section 8.1.1)